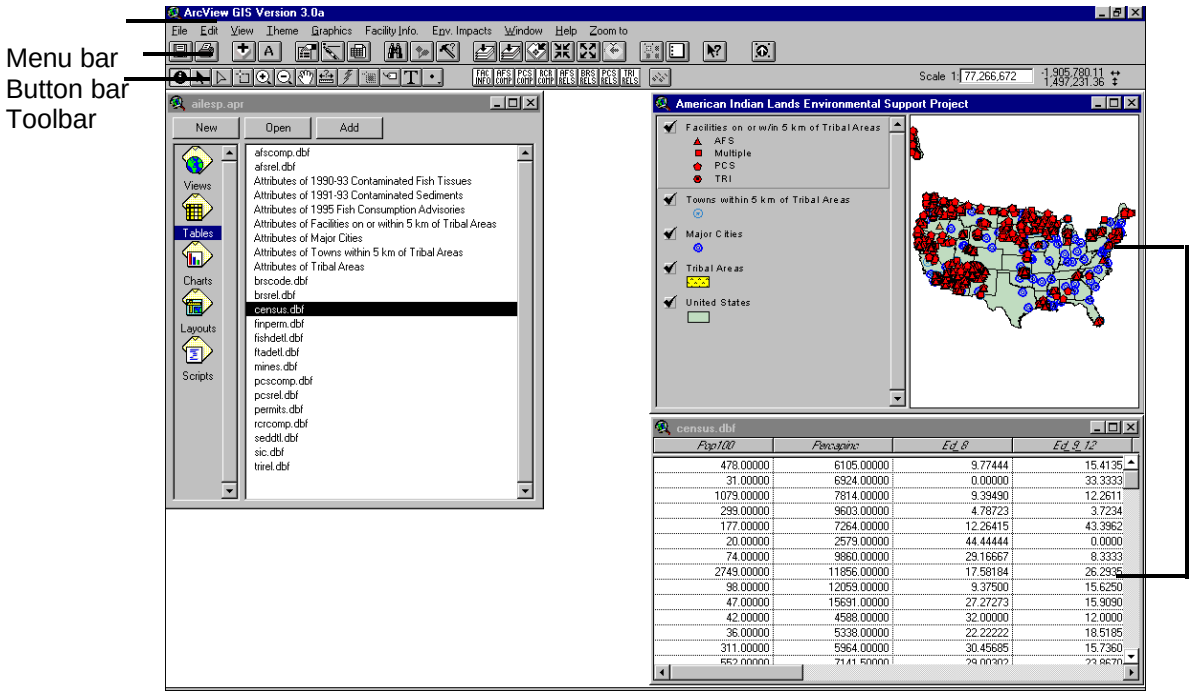
Chapter 3

Application Overview

3.1 GRAPHICAL USER INTERFACE AND DESKTOP STRUCTURE

Like any typical Windows-based application, AILESP Version 2.1 employs a graphical user interface (GUI) as the framework for user interaction. As indicated in the figure below, this framework is contained within the ArcView application window. The application window can be resized, minimized, maximized, and moved just like any other window.



The ArcView GUI consists of the following basic components:

The **menu bar** provides access to ArcView operations in a pull-down menu. Not all menu options are addressed in this documentation. For complete documentation on

ArcView functionality, including more advance features, please refer to the ArcView v.3.0a Users Manual.

The **button bar** provides shortcuts to some of the more commonly used operations in the menu bar.

The **toolbar** accesses operations that are performed with the screen cursor. Each tool defines a unique action for the cursor to perform.

The **status bar** displays a one-line description of a menu choice, button, or tool, as the cursor is moved over (without selecting) various window options. The status bar also reports measurements, displays system messages, and shows a progress bar for lengthy operations.

Document windows are the ArcView windows within which you perform your work.

The four GUI bars are context sensitive and reflect the options relevant to the active document window in which you are working at any given time. The window's top title bar is highlighted when the window is active.

3.2 ARCVIEW PROJECTS

An ArcView project is a collection of associated documents that work together during an ArcView session. A project contains all the views, tables, charts, layouts, and scripts that you use for a particular ArcView application or set of related applications. In this way, your work is stored in one convenient place. Project file names have an .apr extension. Included below is a description of each document type. Most AILESP V.2.1 users will utilize the *views*, *layouts*, and *tables* most often.

 **Views** – *Views* are interactive maps that allow you to display, query, and analyze geographic data and contain a collection of geographic information called themes. A *theme* is a set of geographic features with similar characteristics (e.g. highways, fish consumption advisories, cities etc.). AILESP users will use the View document type most often. *Chapter 4, Using AILESP Version 2.1*, discusses the View document type and features that relate to it.

 **Tables** – Tables display tabular data. Tables store information that describe features on a view (e.g., width of a highway, size of a city, or population of a census block).

 **Charts** – Charts represent tabular data graphically. ArcView provides six styles of charts. AILESP v.2.1 uses the standard charts features provided by ArcView. For more information about Charts, please refer to the ArcView 3.0a Users Manual.

 **Layouts** – Layouts allow you to merge and save map components into a final map for printing or plotting. The Layout document type is described in more detail in *Chapter 6, Printing Layouts*.

 **Scripts** – Scripts is an advanced feature used to customize the ArcView interface. This document type houses the development code that was written to customize AILESP v.2.1. Only the development team uses this function, therefore it is not documented further in this Users Manual.

3.3 AILESP VERSION 2.1 BUTTONS AND TOOLS[1]

When working with views, you will use a combination of the AILESP v.2.1 application and native ArcView functions. Included below are descriptions of the buttons and tools available in AILESP v.2.1. For more detailed instructions on using many of these buttons, please refer to *Chapter 4, Using AILESP Version 2.1*.

3.3.1 The Button Bar

The button bar provides shortcuts to some of the more commonly used operations in the menu bar.

[1] Standard ArcView buttons and tools are denoted as such by an asterisk (*). Descriptions of native features were retrieved from the ESRI ArcView online help.

 **Save Project*** – The Save Project button saves the project you are working on. If your project has not been saved yet, ArcView displays a dialog to let you choose a name and location of your project file.

 **Map Layout** – The Map Layout button allows you to print the map on the screen using Layouts. This produces a formatted map with a legend, titles, and an EPA logo.

 **Add Theme*** – The Add Theme button lets you add one or more themes to the current view from existing data sources such as shapefiles, ARC/INFO coverages, ARC/INFO libraries, images, etc.

 **Add AILESP Themes** – The Add Theme button allows you to add specific themes to your project, including National Highways, National Mining Data, NPL Sites, Fish Advisories, NAAQS Non-attainment Areas, SDWIS, CERCLIS Points, Sediments, and Rivers.

 **Theme Properties***– The Theme Properties button allows you to review and change the properties of the active theme such as its name, how it is displayed in the view, how it is labeled, the definition of the features it will contain, etc.

 **Edit Legend*** – The Edit Legend button allows you to change the legend of the active theme. Clicking this button displays ArcView's Legend Editor. With the Legend Editor, you can change the colors and symbols used to display the theme's features. You can also classify the features and display them with different symbols according to their tabular attributes.

 **Open Theme Table*** – Use the Open Theme Table button to open the attribute table for the active theme(s). A theme's attribute table contains one record of descriptive information for each feature in the theme.

 **Find*** – The Find button allows you to search for a feature in a view, table, or chart that has the attribute value you type in. Find locates the first feature with the value you specified in any of its text attribute fields (i.e., fields containing text strings as opposed to numeric values).

 **Locate Address***– The Locate Address button locates a specific address in the active theme(s). If ArcView can find the address, it places a point symbol at that location. This

option is available when the active theme(s) contains street data or other data that can be used as a base for geocoding. If the active theme contains this sort of data, but the Locate Address button is still dimmed out; you need to build a geocoding index for the theme by selecting “Properties” from the Theme menu and, in the dialog that appears, choosing Gecoding Properties.

 **Query Builder*** – The Query Builder lets you query data according to tabular attributes by building a query expression.

 **Zoom to Full Extent*** – Use the Zoom to Full Extent button to zoom to the full extent of all the themes in a view.

 **Zoom to Active Theme*** – The Zoom to Active Theme button zooms to the spatial extent of the geographic features in the active theme(s).

 **Zoom to Selected*** – If you are currently working on a view, this button zooms to the spatial extent of the currently selected features in the active theme(s). After you have selected features in a theme (for example, by using the Query Builder to find features with particular attributes, or the Select Features button), click this button to zoom in on the area covered by the features you have selected. To make a theme active, click on its name in the view's Table of Contents. If features have been selected from more than one theme, the view extent is set so that all the selected features in the active themes can be seen.

 **Zoom In*** – Use the Zoom In button to zoom in on the center of a view or a layout by a factor of 2.1.

 **Zoom Out*** – The Zooms Out button zooms out from the center of a view or a layout by a factor of 2.1.

 **Zoom to Previous Extent*** – The Zoom to Previous Extent button returns to the previous extent you were viewing. Use this option to return to your last view before you zoomed or panned. ArcView remembers the last five extents you have looked at on the view since opening the project.

 **Select Features Using Graphic***– Selects features from the active theme(s) located under the currently selected graphic(s) drawn on the view. Before using this button, make

the theme containing the features you wish to select active, by clicking on its name in the view's Table of Contents, and then either draw graphics on the view with the drawing tools, or select existing graphics.

 **Clear Selected Features*** – The Clear Selected Features button deselects any selected features in the active view.

 **Projection** – The projection tool allow you to map different data sets within AILESP v.2.1. Please refer to Appendix E for more detailed information about the Projection tool.

 **Help*** – The Help tool displays help topics for any of ArcView's buttons, tools or menu choices. Click the Help button and then click any other button, tool or menu choice to display relevent help topics.

3.3.2 The Toolbar

The **toolbar** accesses operations that are performed with the screen cursor. Each tool defines a unique action for the cursor to perform.

 **Identify*** – Use the Identify tool to display the attribute values of a feature shown in a view, table, or chart. Before using Identify on a view, click on the theme in the Table of Contents that contains the feature you wish to identify, to make the theme active.

 **Pointer***– Use the Pointer tool to select, move, and resize graphics.

 **Vertex Edit*** – Use the Vertex Edit tool to reshape a feature or graphic by moving, adding, or deleting vertices. Refer to Draw Point below for information about drawing graphics.

 **Select Features*** – The Select Feature tool selects a single feature in the theme by clicking on the feature. Using this tool you may also select many features at once by clicking and dragging a rectangular area around the desired features. Certain operations can then be performed on selected features.

 **Zoom In*** – Zooming in increases the scale of the display as it focuses on different areas. You can use the Zoom In tool to zoom in on any area of your map and to any scale.

 **Zoom Out*** – Zooming out decreases the scale of the display as it focuses on different areas.

 **Pan*** – Panning repositions the focus of display without changing its scale.

 **Measure*** – The Measure tool reports the accumulated distance between points that are clicked in the view.

 **Hot Link*** – The Hot Link tool enables to follow a hot link by clicking on any feature in the active theme. Hot links have to be defined before they can be used. For more information about using the Hot Link tool, please refer to the ArcView Users Manual or on-line help.

 **Area of Interest** – Use the Area of Interest tool to set the area of interest for a view containing library-based themes. The area of interest controls which library tiles are accessed.

 **Label*** – The Label tool labels an individual feature in the active theme. Select the Label button and then click on the feature to label it. To label all or selected features in the active theme use the Auto-label tool on the Theme menu.

 **Text*** – Use the Text tool to add or edit text on a view or a map layout.

 **Draw Point*** – Use the Draw Point tool to add a point to a view or a map layout. To add other types of graphics, click on the bottom right hand corner of the Draw Point button; a list of other available graphics appears, including lines, polygons, and circles. Double click to complete a graphic. Refer to Vertex Edit above.

 **Facility Information** – The Facility Information tools provides the facility location, and AFS, BRS, PCS, RCRIS, and TRI permit information. In addition, any Tribal areas within five kilometers of the regulated facility are listed.

 **AFS Enforcement and Compliance Information** – The AFS Enforcement and Compliance Information tool provides location, industrial sector, and enforcement and compliance information for facilities that hold an AFS permit(s) and are located within five kilometers of Tribal areas.

 **PCS Enforcement and Compliance Information** – The PCS Enforcement and Compliance Information tool provides location, industrial sector, and enforcement and compliance information for facilities that hold an PCS permit(s) and are located within five kilometers of Tribal areas.

 **RCRIS Enforcement and Compliance Information** – The RCRIS Enforcement and Compliance Information tool provides location, industrial sector, and enforcement and compliance information for facilities that hold an RCRIS permit(s) and are located within five kilometers of Tribal areas.

 **AFS Release Information** – The AFS Release Information tool provides toxic release information for facilities with an AFS permit(s) that are located within five kilometers of Tribal areas.

 **BRS Release Information** – The BRS Release Information tool provides toxic release information for facilities with a BRS permit(s) that are located within five kilometers of Tribal areas.

 **PCS Release Information** – The PCS Release Information tool provides toxic release information for facilities with a PCS permit(s) that are located within five kilometers of Tribal areas.

 **TRIS Release Information** – This tool provides toxic release information for facilities on the Toxic Release Inventory that are located within five kilometers of an Tribal areas.

 **Tribal Areas Demographics** – The Tribal Areas Demographics tool allows you to display population, income, education, and language information for any Tribal area.

3.4 SAVING A PROJECT

There are two different ways to save a project, 1) save it as a new project, 2) save the project in its current form, overwriting the original file. Please note, AILESP v.2.1 was developed with a customized project. *Do not overwrite this project.* All modifications to AILESP v.2.1 should be saved with a new title using "Save Project As" from the File menu in the View document. If you have made any changes to your project, ArcView gives you the opportunity to save your project when you close it or exit ArcView.

Save a Project

If you have previously created a project, and would like to overwrite it, select "Save Project" from the File menu or click the Save button on your toolbar. The only instance you will save changes to AILESP v.2.1 is after you have specified the path of the *ailesp, fish advisories, highways, NPL sites, NAAQS non-attainment areas, mines, sdwis,* and *stream* files (the first time you open the project). If you make any changes to the AILESP project, save the project under a new project name. See *Save as a New Project*, below, for more information.

Save as a New Project

If you are in AILESP v.2.1 and wish to save changes, select "Save Project As" from the File menu to save the project in its current form as a different project name. Do not overwrite AILESP v.2.1 with your changes. Always save your changes to the project under a different project name.

3.5 EXITING THE APPLICATION

Select "Exit" from the File menu to close and optionally save the current project and exit ArcView.

If you have made changes to AILESP v.2.1, select "Save Project As" from the File menu before exiting and save your changes under a new project name.

If you forget to save your changes under a new project name, click [Cancel] when ArcView prompts you to "Save Changes?" and then select "Save Project As" from the File menu. *Do not overwrite the customized AILESP v.2.1 project.*

3.6 USING HELP

ArcView's on-line help provides reference and "how to" information. It has topics that cover key concepts, step-by-step instructions, and context-sensitive help for specific commands and dialog boxes. By clicking the highlighted text within Help, you can jump to other topics related to the one you're reading.

Viewing a list of Help topics

To view a list of help topics, select “Help Topics” from the Help menu.

Getting help on a specific menu item, button, tool, or document

Click the Help button on the button bar, then use your cursor to click the particular command, button, tool, or document you wish to know more about.

Getting help on a dialog box

To view more information on a dialog box that is currently open in your window, move the cursor to the dialog box and press the F1 key on your keyboard.

Searching Help for a specific topic

1. Select “Help Topics” from the Help menu. Click on the Index tab to make it active.

2. In the uppermost box, type in the first few letters of a word or phrase relating to the topic you want to search for. As you type, Help displays words and phrases in the list box that match your character string.

3. Double click the word or phrase related to your subject (or select it, and click the [Show Topics] button). The list box in the lower portion of the dialog box displays the relevant topics for the word or phrase that you selected.

4. In the lower list box, double click the topic you want to view (or select it, and click the [Go To] button).